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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,034	01/23/2007	Kwang-Soon Kim	123054-06053473	9121
	7590 02/25/200 CMAN HAM & BERN		EXAM	IINER
1700 DIAGONAL ROAD			SEKUL, MARIA LYNN	
SUITE 300 ALEXANDRIA	ULTE 300 LEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
			4124	
			MAIL DATE	DELIVERY MODE
			02/25/2009	PAPER

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Summers	10/577,034	KIM ET AL.					
Office Action Summary	Examiner	Art Unit					
	MARIA L. SEKUL	4124					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	ldress				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <a href="mailto:one(1)">one(1)</a> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on 23 Ja	nnuary 2007						
·=	, <del></del>						
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under E	x parte Quayle, 1955 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1-31</u> is/are pending in the application.							
·— · · · · · · · · · · · · · · · · · ·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) is/are rejected.	· · · · · · · · · · · · · · · · · · ·						
7) Claim(s) is/are rejected.							
· · · · · · · · · · · · · · · · · · ·	la ation no accionna ant						
8) Claim(s) <u>1-31</u> are subject to restriction and/or 6	8) Claim(s) <u>1-31</u> are subject to restriction and/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	r.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
- · · · · · · · · · · · · · · · · · · ·							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
TI) The oath of declaration is objected to by the Ex	anniner. Note the attached Office	Action of lonner	10-132.				
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some color None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	te					

## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10 and 26, drawn to configuring a downlink signal to send from a base station to a mobile station.

Group II, claim(s) 11-25 and 27-31 drawn to synchronizing a base station with a mobile station.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature in Group I is allocating and inserting pilot subcarriers into an OFDMA downlink frame which is not present in Group II; the special technical feature of Group II is performing initial synchronization and tracking which is not present in Group I.

A telephone call was made to Yoon Ham on February 12, 2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

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2. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement may be traversed (37 C.F.R. 1.1.43).

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. On review of the instant application for unity of invention only, it appears the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. To facilitate examination of the application, please provide a proper translation of the foreign application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA L. SEKUL whose telephone number is (571)270-7636. The examiner can normally be reached on Monday - Friday 8:00-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARIA L. SEKUL Examiner Art Unit 4124

/M. L. S./ Examiner, Art Unit 4124

/Brian T. Pendleton/ Supervisory Patent Examiner, Art Unit 2425